

## FAST AND ENZYMELESS CLONING OF NUCLEIC ACID FRAGMENTS

### Abstract of the Disclosure

5 A method for cloning a nucleic acid fragment into a vector by flanking the fragment with first and second adapter sequences, and contacting the fragment with the vector having sequences homologous to the first and second adapter sequences under conditions such that the nucleic acid fragment is incorporated into the vector by homologous recombination *in vivo* in a host cell. Additionally, a method for selecting for a successful transformation of a vector by a nucleic acid insert. Also, systems for cloning a nucleic acid fragment into a vector without restriction enzyme, ligase, gyrase, 10 single stranded DNA binding protein, or other DNA modifying enzymes. Further, a kit for cloning a nucleic acid fragment into a vector.

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